

## Product datasheet for **RC222739**

### KCNMB3 (NM\_171830) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMB3 (NM_171830) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNMB3
Synonyms:	BKBETA3; HBETA3; K(VCA)BETA-3; KCNMB2; KCNMBL; SLO-BETA-3; SLOBETA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222739 representing NM_171830 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTCCCCCTTCTTTATGAGCTCACTGCAGTATCTCCTTCTCCCTTTCCCAAAGGACAGCCTTTCCTG  
CCTCAGGGAAGAAGAGAGAGACAGACTACAGTGATGGAGACCCACTAGATGTGCACAAGAGGCTGCCATC  
CAGTGCTGGAGAGGACCGAGCCGTGATGCTGGGGTTTGCCATGATGGCTTCTCAGTCTAATGTTCTTC  
TTGCTCGGAACAACCATTCTAAAGCCTTTATGCTCAGCATTAGAGAGAAGAATCGACCTGCCTGCCA  
TCCACACAGATATCATGGACGACTGGCTGGACTGTGCCTTCCCTGTGGTGTGCACTGCCACGGTCAGGG  
GAAGTACCCGTGCTTCCAGGTGTTGTGAACCTCAGCCATCCAGGTCAGAAAGCTCTCTACATTATAAT  
GAAGAGGCTGTCCAGATAAATCCCAAGTCTTTACACACCTAAGTGCCACCAAGATAGAAATGATTTGC  
TCAACAGTGCTCTGGACATAAAAGAATTCTTCGATCACAAAAATGGAACCCCTTTTCATGCTTCTACAG  
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TTTTGGCCTTCACTGACTCTGCTAGGTGGTCCCTGATTGTTGGCATGGTGAATTAACACAACCTGT  
CCTTACTGTGTGAAAAATATAGCACTGTAGTCAGAGATGAGGTAGGTGAAAAAGTACCTTATATAGAACA  
GCATCAGTTCAAAGTGTGCAATTATGAGGAGGAGCAAAGGAAGAGCAGAGAAATCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC222739 representing NM\_171830  
Red=Cloning site Green=Tags(s)

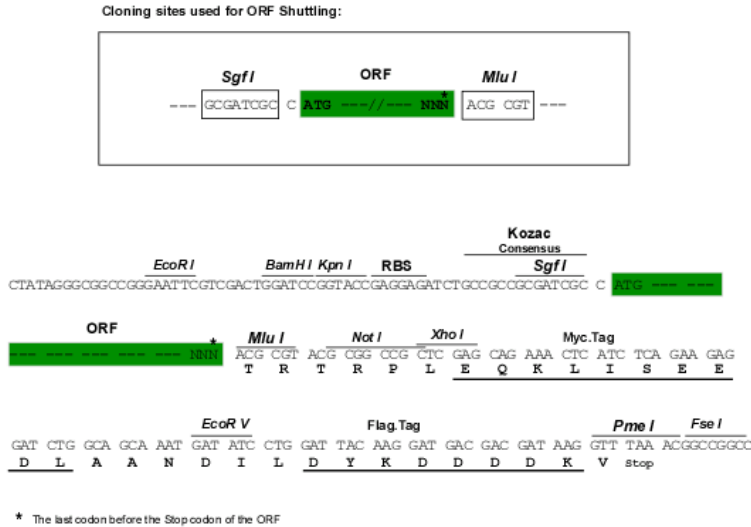
MFPLL YELTAVSPSPFPQRTAFPASGKKRETDYSDGDPDLDVHKRLPSSAGEDRAVMLGFAMMGFSVLMFF  
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 EEAVQINPKCFYTPKCHQDRNDLLNSALDIKEFFDHKNGTPFSCFYSPASQSEDVILIKKYDQMAIFHCL  
 FWPSLTLGGALIVGMVRLTQHL SLLCEKYSTVVRDEVGGKVPYIEQH QFKLCIMRRSKGRAEKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8048\\_f12.zip](https://cdn.origene.com/chromatograms/mk8048_f12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_171830

**ORF Size:** 825 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_171830.1](#), [NP\\_741981.1](#)

**RefSeq Size:** 1835 bp

**RefSeq ORF:** 828 bp

**Locus ID:** 27094

**UniProt ID:** [Q9NPA1](#)

**Cytogenetics:** 3q26.32

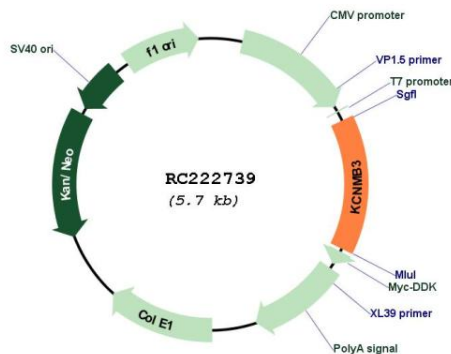
**Protein Families:** Druggable Genome, Ion Channels: Other, Transmembrane

**Protein Pathways:** Vascular smooth muscle contraction

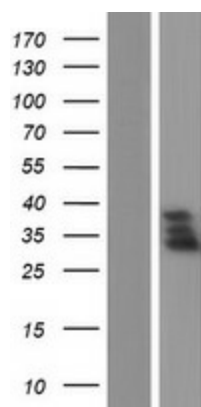
**MW:** 30.9 kDa

**Gene Summary:** MaxiK channels are large conductance, voltage and calcium-sensitive potassium channels which are fundamental to the control of smooth muscle tone and neuronal excitability. MaxiK channels can be formed by 2 subunits: the pore-forming alpha subunit and the modulatory beta subunit. The protein encoded by this gene is an auxiliary beta subunit which may partially inactivate or slightly decrease the activation time of MaxiK alpha subunit currents. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 22. [provided by RefSeq, Jul 2009]

### Product images:



Circular map for RC222739



Western blot validation of overexpression lysate (Cat# [LY406786]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222739 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).